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### **DETAILED ACTION**

# Response to Amendment

In view of the amendment, filed on 02/25/2008 following rejections/objections are withdrawn from the previous office action, mailed on 10/30/2007, for the reason of record.

- Objection to the oath/declaration
- Objection to the drawings
- Rejection of claim 13 under 35 U.S.C. 112, second paragraph
- Rejection of claims 1, 13, 55-57, and 60 under 35 U.S.C. 102(e)
  as being anticipated by Shih et al. (US 2004/0029041)
- Rejection of claims 51 and 52 under 35 U.S.C. 103(a) as being unpatentable over Shih et al (041) in view of Westmoreland (US 2002/0185584)
- Rejection of claims 53 and 54 under 35 U.S.C. 103(a) as being unpatentable over Shih et al ('041) in view of Sreenivasan et al (US 7,136,150)

#### **EXAMINER'S AMENDMENT**

The application has been amended as follows:

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This application is in condition for allowance except for the presence of claims 2-12, 14-50, 58-59, 61-66 which are non-elected claims without traverse, as indicated by the applicants, in response filed on July 10, 2007. Accordingly, claims 2-12, 14-50, 58-59, 61-66 has been cancelled.

## Allowable Subject Matter

Claims 1, 13, 51-57, and 60 are allowed.

Claims 2-12, 14-50, 58-59, and 61-66 are cancelled.

The following is an examiner's statement of reasons for allowance:

The prior arts of record fail to teach or suggest an imprint lithography multilevel mold comprising a substrate coated with a trilayer hardmask stack in which the trilayer hardmask stack includes a bottom hardmask etch-stop layer being in contact with the substrate, a middle hardmask layer having a composition suitable to print a negative line-level pattern which is in contact with an exposed surface of the bottom etch-stop layer, and a top layer having a composition suitable to print a negative via level pattern which is in contact with an exposed surface of the middle layer wherein the upper surface of the top layer include a removable negative via level pattern to form a topographical pattern; furthermore, the prior arts of record fail to teach or suggest a resist coating formed on the upper surface of the hardmask stack top layer in which the resist coating being patterned with a

negative line level pattern, and moreover, the multilevel mold elements through the tri-layer hardmask stack and the substrate are aligned and corresponded to the negative line level pattern and to the negative via level pattern formed in a negative of a dual damascene-like structure, as claimed in claim 1. The closest prior arts of record Bulthaup et al. (US 6,936,181), Sreenivasan et al. (US 2004/0021254), and Shih et al. (US 2004/0029041) fail to teach an imprint lithography multilevel mold with a trilayer hardmask stack wherein the tri-layer hardmask stack includes a bottom hardmask etch-stop layer, a middle hardmask layer having a composition suitable to print a negative line-level pattern, and a top hardmask layer having a composition suitable to print a negative via level pattern in which further a resist coating is formed on the upper surface of the hardmask stack top layer. Therefore, claims 1, 13, 51-57, and 60 are deemed allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Masoud Malekzadeh whose telephone number is 571-272-6215. The examiner can normally be reached on Monday – Friday at 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (571) 272-1189. The fax number for the organization where this application or proceeding is assigned is 571-2723-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance form a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 1791

/Steven P. Griffin/

Supervisory Patent Examiner, Art Unit 1791